AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A data-empowered test program architecture stored on a computer

readable storage medium, comprising:

          at least one control file defining a test sequence and instructions for executing the test

sequence;

          a test executive software module configured to determine which test sequence to use

based on the at least one control file;

          a test framework software module ~~having externally configurable generic software~~

~~code and being coupled for interaction with the test executive software module~~ configured to receive

the test sequence from the test executive software module, and determine how to perform the test

sequence and perform the test sequence based on the instructions in the at least one control file; and

          a plurality of software components in a software components module coupled for

interaction with the test framework software module and structured for outputting ~~one or more test~~

~~reports~~ at least one test report. [[;]] ~~and~~

          ~~one or more external control files coupled for configuring the generic software code of the~~

~~test framework software module~~[[.]]

2.   (Original)   The architecture of claim 1 wherein the test framework software module

further comprises a hardware abstraction interface.

3.   (Original)   The architecture of claim 1, further comprising an external reuse library

having one or more test descriptions of common signal types and being coupled for generating the

control files.

4.   (Original)   The architecture of claim 1 wherein the software components module further

comprises one or more software components for interfacing between the one or more external

control files and one or more of the test executive software module and the test framework software

module.

5.   (Original)   The architecture of claim 1 wherein the software components module further

comprises a pass/fail analyzer and report generator having one or more modes of pass/fail analysis

and test reporting.

6.   (Currently Amended) A data-empowered test program architecture comprising:

one or more external control ~~files including an external control file~~ having a list of test identification numbers <u>defining a test sequence and instructions for executing the test sequence</u>;

a test executive module having an execution engine coupled to receive one or more test identification numbers from the list of test identification numbers for generating<u>,</u> as a function of the one or more test identification numbers<u>,</u> a plurality of test actions to be performed on a unit-under-test <u>as defined in the test sequence</u>;

a test framework module accessing the plurality of test actions and ~~associated test hardware resources as a function of the test identification numbers~~ <u>and the instructions</u>, the test framework module <u>configured to perform, based on the instructions, the steps of</u>:

i) determining an identification of one of the test hardware resources associated with a current one of the test action,

ii) retrieving the identification of the associated test hardware resource,

iii) determining a signal type corresponding to the retrieved test hardware resource identification,

iv) accessing as a function of the signal type one of the external control files having test hardware resource card-type information, and

v) determining the test hardware resource card-type information as a function of a card-type identifier.

7.   (Original)   The architecture of claim 6 wherein the test hardware resource card-type

information includes routing data and parameters for interfacing with an external hardware driver.

8.   (Original)   The architecture of claim 6, further comprising an external reuse library

having a plurality of test descriptions corresponding to a plurality of different test signal types.

9.   (Original)   The architecture of claim 6, further comprising a plurality of software

components for interfacing between the external control files and one or more of the test executive

module and the test framework module.

10.   (Original)   The architecture of claim 9 wherein the plurality of software components

further comprises one or more modes of pass/fail analysis and test reporting.

11.   (Currently Amended) A data-empowered test program architecture comprising:

means for ~~generating~~ <u>determining</u> a plurality of test actions to be performed on a unit-under-

test <u>and instructions for performing the plurality of test actions</u>;

means for accessing the ~~plurality of the test actions~~ <u>instructions</u>;

means for identifying<u>, based on the instructions,</u> [[a]] test hardware resources associated with

a current one of the <u>plurality of</u> test ~~action~~ <u>actions</u>; and

means for interfacing with an external hardware driver as a function of identifying the test

hardware resources associated with the current one of the test action.

12.   (Currently Amended) The architecture of claim <u>11</u> wherein the means for interfacing with an

external hardware driver further comprises:

means for determining a signal type corresponding to the identified test hardware resource;

means for accessing as a function of the signal type an external control file having test

hardware resource card-type information contained therein; and

means for determining the test hardware resource card-type information as a function of a

card-type identifier.

13.   (Original)   The architecture of claim 11 wherein the means for generating a plurality of

test actions further comprises means for generating the plurality of test actions as a function of one

or more test identification numbers received from a list of test identification numbers.

14.   (Original)   The architecture of claim 11 wherein the means for generating a plurality of test actions to be performed on a unit-under-test further comprises means for generating a plurality of control files for configuring software code for generating the plurality of test actions.

15.   (Original)   The architecture of claim 14 wherein the means for generating a plurality of control files further comprises means for generating one or more of the control files as a function of one or more test descriptions of signal types contained in an external reuse library.

16.   (Original)   The architecture of claim 11, further comprising means for performing pass/fail analysis.

17.   (Original)   The architecture of claim 16, further comprising means for generating one or more test reports.

18.   (Currently Amended) ~~A computer program product~~[[,]] comprising[[:]]

~~a computer usable medium having computer-readable code embodied therein for configuring a computer, the computer program product comprising~~[[:]]

<u>A computer-readable medium having instructions stored thereon, which instructions, when executed by a processor cause the processor to:</u>

<u>determine which of a plurality of test actions to perform;</u>

~~computer-readable code configured to cause a computer to generate a~~ <u>determine how to perform the</u> plurality of test actions <u>based on the instructions</u>;

~~computer-readable code configured to cause the computer to access~~ <u>perform</u> the plurality of ~~the~~ test actions <u>based on the instructions</u>;

~~computer-readable code configured to cause the computer to~~ identify a test hardware resource associated with a current one of the <u>plurality of</u> test ~~action~~ <u>actions</u>; and

~~computer-readable code configured to cause the computer to~~ interface with an external hardware driver as a function of the test hardware resources associated with the current one of the <u>plurality of</u> test actions.

19.   (Currently Amended) The ~~computer product~~ computer-readable medium of claim 18 ~~wherein~~

~~the computer-readable code configured to cause a computer to interface with an external hardware~~

~~driver further comprises computer-readable code configured to cause a computer~~ further comprising

instructions which cause the processor to:

determine a signal type corresponding to the identified test hardware resource;

as a function of the signal type, access an external control file having test hardware resource

card-type information contained therein; and

as a function of a card-type identifier, determine the test hardware resource card-type

information.

20.   (Currently Amended) The ~~computer product~~ computer-readable medium of claim 18 ~~wherein~~

~~the computer-readable code configured to cause a computer to generate a plurality of test actions~~

~~further comprises computer-readable code configured to cause a computer~~ further comprising

instructions which cause the processor to:

receive from a list of test identification numbers one or more test identification numbers, and

~~to~~

generate the plurality of test actions as a function of the received test identification number.

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21.   (Currently Amended) The ~~computer product~~ computer-readable medium of claim 18, ~~further~~

~~comprising computer-readable code configured to cause a computer~~ further comprising instructions

which cause the processor to perform a pass/fail analysis.

22.   (Currently Amended) The ~~computer product~~ computer-readable medium of claim 21, ~~further~~

~~comprising computer-readable code configured to cause a computer~~ further comprising instructions

which cause the processor to generate one or more test reports.

23.   (Currently Amended) The ~~computer product~~ computer-readable medium of claim 18, ~~further~~

~~comprising computer-readable code stored in one or more software components and configured to~~

~~cause a computer to interface between the computer-readable code configured to cause a computer~~

further comprising instructions which cause the processor to:

        generate a plurality of test actions; and ~~the computer-readable code configured to cause a~~

~~computer to~~

        access the plurality of the test actions.